

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1 (currently amended): A method for preparing at ~~[[lest]]~~ least one chemical reaction product by means of chemical reaction of one or more reactants, optionally dissolved in one or more solvents, which are supplied as a feed flow, through the contact with a heterogeneous catalyst in a continuously operated fixed-bed reactor packed with a particle bed, a continuous annular chromatograph (CAC), packed with said particle bed, being used as said fixed-bed reactor in which said at least one reaction product is formed and purified and said at least one purified reaction product as well as any by-products and/or unreacted reactants present are withdrawn from said annular chromatograph each at a different and predetermined rotational angle position, ~~characterized in that~~ using only one type of particulate material in a single particle bed ~~is used~~ as both catalyst for the formation of said at least one reaction product in said particle bed and as chromatographic medium for the purification thereof, and recirculating and reusing any unreacted reactants and/or by-products in the chemical reaction.

Claim 2 (currently amended): The method according to claim ~~[[1]]~~ 10, characterized in that any unreacted reactants and/or by-products are recirculated and reused in the chemical reaction.

Claim 3 (previously presented): The method according to claim 1, characterized in that said particulate material comprises a catalyst material which is uniformly distributed therein and/or thereon.

Claim 4 (previously presented): The method according to claim 1, characterized in that said particulate material entirely consists of catalyst material.

Claim 5 (previously presented): The method according to claim 1, characterized in that an ion exchange resin is packed as said particulate material.

Claim 6 (previously presented): The method according to claim 1, characterized in that a zeolite is packed as said particulate material.

Claim 7 (previously presented): The method according to claim 1, characterized in that said particle bed is heated and/or cooled during said reaction/purification.

Claim 8 (previously presented): The method according to claim 1, characterized in that several zones of different temperatures are created by heating and/or cooling during said reaction/purification.

Claim 9 (previously presented): The method according to claim 1, characterized in that a continuous temperature gradient is set by heating and/or cooling during said reaction/purification.

Claim 10 (previously presented): The method according to claim 1, characterized in that at least one reactant is supplied in a solvent.

Claim 11 (currently amended): The method according to claim [[10]] 19, characterized in that said solvent at the same time acts as eluent.

Claim 12 (currently amended): The method according to claim [[10]] 19, characterized in that at least one of the reactants acts as solvent.

Claim 13 (previously presented): The method according to claim 1, characterized in that at least one of the reactants supplied is a polyvalent reactant from which several different reaction products are formed during the reaction.

Claim 14 (currently amended): The method according to claim ~~[[13]]~~ 20, characterized in that one of all possible reaction products is preferentially recovered by controlling the operating parameters.

Claim 15 (original): The method according to claim 14, characterized in that it is substantially said one reaction product which is recovered.

Claim 16 (previously presented): The method according to claim 1, characterized in that acetic acid and glycerol are supplied as reactants and triacetin is recovered as the preferred reaction product.

Claim 17 (previously presented): The method according to claim 1, characterized in that phenol and acetone are supplied as reactants and bisphenol A is recovered as the preferred reaction product.

Claim 18 (previously presented): The method according to claim 1, characterized in that acetic acid and methanol are supplied as reactants and methyl acetate is recovered as the preferred reaction product.

Claim 19 (new): A method for preparing at least one chemical reaction product by means of chemical reaction of one or more reactants, optionally dissolved in one or more solvents, which are supplied as a feed flow, through the contact with a heterogeneous catalyst in a continuously operated fixed-bed reactor packed with a particle bed, a continuous annular chromatograph (CAC), packed with said particle bed, being used as said fixed-bed reactor in which said at least one reaction product is formed and purified and said at least one purified reaction product as well as any by-products and/or unreacted reactants present are withdrawn from said annular chromatograph each at a different and predetermined rotational angle position, characterized in that only one type of particulate material in a single particle bed is used as both catalyst for the formation of said at least one reaction product in said particle bed and as chromatographic medium for the purification thereof and at least one reactant is supplied in a solvent.

Claim 20 (new): A method for preparing at least one chemical reaction product by means of chemical reaction of one or more reactants, optionally dissolved in one or more solvents, which are supplied as a feed flow, through the contact with a heterogeneous catalyst in a continuously operated fixed-bed reactor packed with a particle bed, a continuous annular chromatograph (CAC), packed with said particle bed, being used as said fixed-bed reactor in which said at least one reaction product is formed and purified and said at least one purified reaction product as well as any by-products and/or unreacted reactants present are withdrawn from said annular chromatograph each at a different and predetermined rotational angle position, characterized in that only one type of particulate material in a single particle bed is used as both catalyst for the formation of said at least one reaction product in said particle bed and as chromatographic medium for the purification thereof and at least one of the reactants supplied is a polyvalent reactant from which several different reaction products are formed during the reaction.

Claim 21 (new): A method for preparing at least one chemical reaction product by means of chemical reaction of one or more reactants, optionally dissolved in one or more solvents, which are supplied as a feed flow, through the contact with a heterogeneous catalyst in a continuously operated fixed-bed reactor packed with a particle bed, a continuous annular chromatograph (CAC), packed with said particle bed, being used as said fixed-bed reactor in which said at least one reaction product is formed and purified and said at least one purified reaction product as well as any by-products and/or unreacted reactants present are withdrawn from said annular chromatograph each at a different and predetermined rotational angle position, characterized in that only one type of particulate material in a single particle bed is used as both catalyst for the formation of said at least one reaction product in said particle bed and as chromatographic medium for the purification thereof, and acetic acid and glycerol are supplied as reactants and triacetin is recovered as the preferred reaction product.

Claim 22 (new): A method for preparing at least one chemical reaction product by means of chemical reaction of one or more reactants, optionally dissolved in one or more

solvents, which are supplied as a feed flow, through the contact with a heterogeneous catalyst in a continuously operated fixed-bed reactor packed with a particle bed, a continuous annular chromatograph (CAC), packed with said particle bed, being used as said fixed-bed reactor in which said at least one reaction product is formed and purified and said at least one purified reaction product as well as any by-products and/or unreacted reactants present are withdrawn from said annular chromatograph each at a different and predetermined rotational angle position, characterized in that only one type of particulate material in a single particle bed is used as both catalyst for the formation of said at least one reaction product in said particle bed and as chromatographic medium for the purification thereof, and phenol and acetone are supplied as reactants and bisphenol A is recovered as the preferred reaction product.

Claim 23 (new): A method for preparing at least one chemical reaction product by means of chemical reaction of one or more reactants, optionally dissolved in one or more solvents, which are supplied as a feed flow, through the contact with a heterogeneous catalyst in a continuously operated fixed-bed reactor packed with a particle bed, a continuous annular chromatograph (CAC), packed with said particle bed, being used as said fixed-bed reactor in which said at least one reaction product is formed and purified and said at least one purified reaction product as well as any by-products and/or unreacted reactants present are withdrawn from said annular chromatograph each at a different and predetermined rotational angle position, characterized in that only one type of particulate material in a single particle bed is used as both catalyst for the formation of said at least one reaction product in said particle bed and as chromatographic medium for the purification thereof, and acetic acid and acetone are supplied as reactants and methyl acetate is recovered as the preferred reaction product.